Polestar
Insurance Company

AGRICULTURE INSURANCE

Issue: March 2018

CONTENTS

1. COUNTRY OVERVIEW 2
   LOCATION 2
   TOPOGRAPHY 3
   CLIMATE 4
2. AGRICULTURE IN DPR KOREA 5
   CROP 5
      RICE & MAIZE 6
      POTATO 6
   FRUIT 7
   LIVESTOCK 8
   AQUACULTURE 9
3. AGRICULTURE BUSINESS OF POLESTAR INSURANCE COMPANY 10
   HISTORY AND PERSPECTIVE 10
   UNDERWRITING 11
   LOSS ASSESSMENT 11
   MAIN PROVISIONS 12
      SUBJECT MATTERS 12
      INSURED PERILS 12
      TRIGGER POINT 12
      INSURED YIELD 13
   BUSINESS DEVELOPMENT 13
      PREMIUM INCOME 13
      AGRICULTURE REINSURANCE 14

1. COUNTRY OVERVIEW

LOCATION

The Democratic People's Republic of Korea (DPR Korea) is located on the north eastern seaboard of Asia (extending to latitude 33°06' 43"~43°00' 36" N and to longitude 124°10' 47"~131° 52' 40" E).

The country is a peninsular bordered in the north by the People's Republic of China and Russia, and the east by the Korean East Sea and the west by the Korean West Sea.

It is bounded by the People's Republic of China, with which it shares a 1,353.2 km border along the Amnok and Tuman Rivers, and by Russia, with which it shares a 16.2 km border along the Tuman River.

TOPOGRAPHY

TOPOGRAPHY

The Korean peninsula is predominately mountainous.

Indeed, approximately 80% of the total land area comprises moderately high mountain ranges and uplands, separated by deep, narrow valleys and small, cultivated plains.

Indeed, mountains and valleys characterize most of the country.

Elevation ranges from sea level along the coasts to 2,750 meters at Mt. Paektu, the highest mountain in DPR Korea and the peninsula.

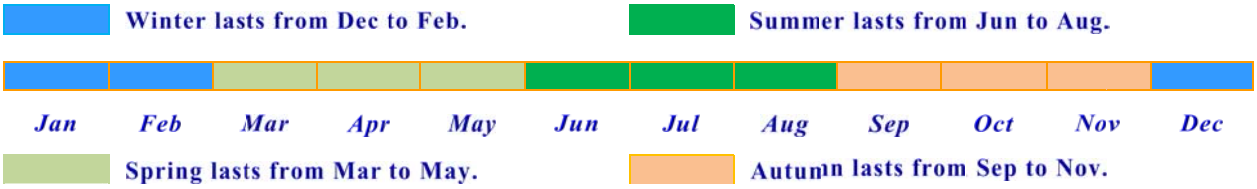
Large river-valley plains have developed between the western mountains and merge along the narrow, irregular coastal plain on the west coast.

The mountain ranges in the northern and eastern parts form the watershed for most of its rivers, the majority of which run in a westerly direction and empty into the Korean West Sea.

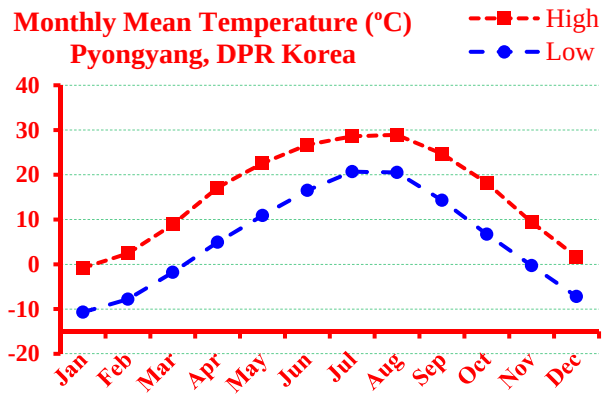
CLIMATE

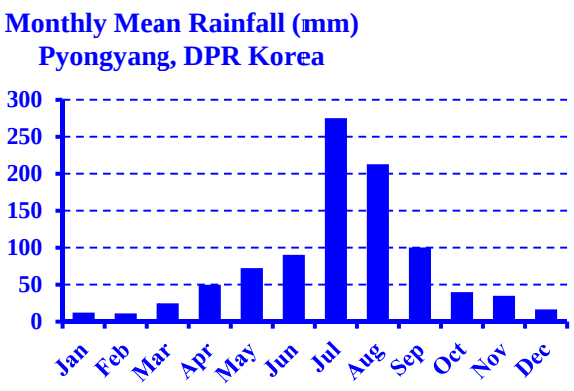
Located between 33rd and 43rd Parallels, DPR Korea has a continental climate from a temperate standpoint and a monsoonal climate from a precipitation standpoint, with four distinct seasons. The country suffers the extremes of both climate types, given that it's surrounded by water on three sides. In winter the winds are predominantly from the west and north, bringing very cold but dry air from north China and Siberia. In summer the winds are mainly from the east and south, bringing warm, moist air from the Pacific Ocean.

KOREAN SEASONAL TIMELINE



Severe winters cause rivers to freeze and snowfall can cover the ground for long periods of time. Spring is a transitional season marked by mild temperatures, variable winds, and generally mild weather. However, the arrival of the summer rainy season often brings frequent and severe floods because of the southern and southeastern monsoon winds that bring moist air from the Pacific Ocean. The rainy season, *the so-called changma season*, continues for a month from late June until late August. Annually, tens of typhoons occur in the western Pacific, however, only two or three approach the Korean Peninsula during the period June through to September. Autumn is drier and cooler, with crisp, bright days, and cool nights.





2. AGRICULTURE IN DPR KOREA

CROP

Despite the climatic and land restrictions in DPR Korea, there is a wide range of agriculture industries such as grain crops, vegetables, fruits and cash crops.

Approximately 2,000,000 *jongbo* (*1jongbo equals approximately 1hectare*) of land are currently cultivated, of which about 1,000,000 hectares are devoted to rice and maize production in 50% respectively and about 500,000 hectares to potato, vegetables, cash crops and etc. On the other hand 500,000 hectares are to fruits and mulberries.

Thanks to the investment of the state on a large scale, the land reclamation projects were completed throughout the country including major granary areas.

As a result of the completion of water channel projects, hundreds of farms are able to be supplied water by gravity system without relying on pump stations.

Normally the farms over the country had been formed chiefly on the basis of Ri which is the terminal unit of administrative infrastructure.

Each farm varies in size according to location. The average size is 300~350 hectares and in the south this may increase to 500~1,000 hectares whereas in the north on steeper country only 50~100 hectares may be the minimum.

❖ RICE & MAIZE

Rice and Maize are the two main crops grown with transplantation in May and growing through to harvest in late September and early October.

On the broad expanse of the relatively flat western plains as well as the eastern coastal plains, rice and maize are grown. In addition, most of the farms also grow a variety of vegetables, cash crops mainly such as hop, tobacco, ginseng, tea and cotton.

❖ POTATO

The farms in northern parts grow potato. The government spares no efforts to provide government sponsored investment to potato farming to fully meet the domestic food demands. As a result, potato, together with rice and maize, occupies an important position in the agricultural production. As a total, it can be said that despite the climatic restrictions, farming in our country is diverse and continues to develop in line with the country's production needs.

FRUIT

According to the government plan for supplying the people with tasteful and fresh fruits all the year round, many fruit farms have been well established as the fully integrated base for fruit production all over the country and have introduced green production and other advanced production methods.

The farms have increased production steadily by introducing the densely planting techniques of dwarf fruit trees and other advanced fruit farming methods and breeding and growing high-yielding kinds of fruit trees as befits the climatic and soil conditions of our country.

They grow tens of fruit trees of Korean origin and high-yielding fruit trees from abroad and produce young saplings on their own for their farming.

LIVESTOCK

The breeding method of livestock is variable with the seasonal characteristics and livestock species.

First of all, the oxen, the sheep and the goats are raised either in pens and folds or in pasture according to the seasonal conditions.

And the pigs and poultries are reared in pens and cages in one or multi-storied buildings built with cement, steel and timbers and equipped with modern facilities and enclosed by fences as the prevention of infectious disease.

In our country the system of anti-epizootic has been established in good order from center to each province, each county and each farm.

AQUACULTURE

The fish farms have widely conducted offshore and cage-net fish farming together with freshwater fish farming and have cultivated on a scientific basis various kinds of aquatic animals and plants in line with the trend of the international development in the industries, thus increasing the production steadily over recent years.

The freshwater fish farms grow various kinds of fishes with good taste and rich nutrition in fishponds and cage-nets installed in rivers and streams; carp, rainbow trout, loach, catfish, eel, and so on.

And the offshore fish farms grow various kinds of aquatic plants such as tangle, seaweed and laver; of crustaceans such as blue crab, hairy crab and lobster; and also of mollusks such as clam, mussel, oyster and abalone as suited to the specific condition of the country being surrounded by the sea on three sides.

3. AGRICULTURE BUSINESS OF POLESTAR INSURANCE COMPANY

HISTORY AND PERSPECTIVE

Polestar Insurance Company (PIC) started with agriculture business in 2017.

Agriculture Division in the Head Office is in charge of agriculture insurance business and regional and branch offices engage at least one member of staff who is responsible to manage the agriculture business.

These staffs are specialized in agriculture or have direct working experience in agriculture.

The company mainly insures rice, maize and potato of cooperative farms and is extending agriculture business to fruit and aquaculture farming.

The company intends to apply multi-peril crop insurance coverage to cash crop and introduce weather-index insurance and livestock insurance in the coming year in order to satisfy various demands of farms for insurance.

UNDERWRITING

CARA members surveying condition of growth

When a farm management wants his farm insured, he must fill out the application form together with questionnaire and submit it.

The crop insurance manager visits the farms to confirm the application details and then issues insurance policies.

The Central Agricultural Risks Association (CARA), local independent agricultural surveyor, monitors and supervises during the growing season periodically.

LOSS ASSESSMENT

CARA members cutting crop for loss assessment

We request insureds to notify our relevant local branch by the quickest means available in the event of loss and preserve the damaged area until the arrival of surveyors and submit relevant documents in respect of the loss.

Upon the notification of loss, the company requests CARA to conduct a survey on loss and gives assistance to their survey.

We indemnify the insureds for the losses suffered in accordance with the loss adjustment reports of CARA.

MAIN PROVISIONS

❖ SUBJECT MATTERS

INSURANCE		SUBJECT MATTERS
• *Crop*	:	rice, maize, potato
• *Fruit*	:	fruit (apple, pear, peach, plum, apricot, etc.) and fruit trees
• *Aquaculture*	:	aquatic animals and plants

❖ INSURED PERILS

- *Crop Insurance*

  Rice : flood/excessive rainfall, windstorm, hail

  Maize : drought, windstorm

  Potato : drought, excessive moisture, hail, frost

- *Fruit Insurance*

  freeze, excessive moisture, extreme heat, frost, fire and extended perils

- *Aquaculture Insurance*

  accidents, diseases, oil pollution, fire and extended perils

❖ TRIGGER POINT

Each insured peril has a specific trigger point and major trigger points are as follows.

- *Flood/Excessive Rain*

  more than 100mm rainfall per 24 consecutive hours

- *Windstorm*

  more than 60km/h wind speed

- *Hail*

  more than 5mm ice piece in diameter

- *Drought*

  more than 15 consecutive no rain days (rainfall below 10mm per day during the said days deemed to be as non-effective)

It is important to note that these are only triggers to activate the policy. They do not mean that a claim will be incurred. CARA surveyors will inspect the crop once a trigger has been activated to determine any evidence of crop loss.

❖ INSURED YIELD

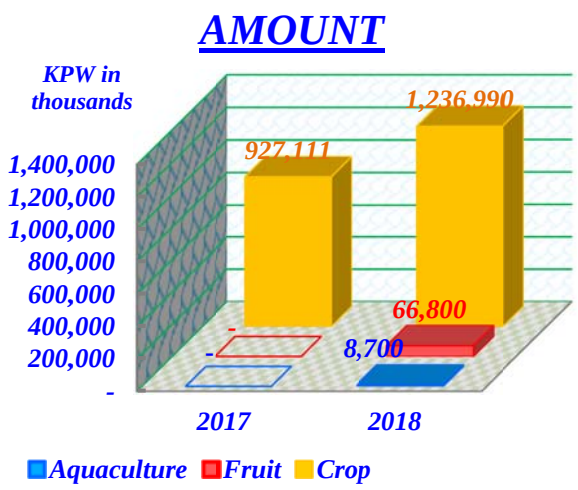
The insured yield will be calculated on the basis of following percentage of 5-year rolling average yield.

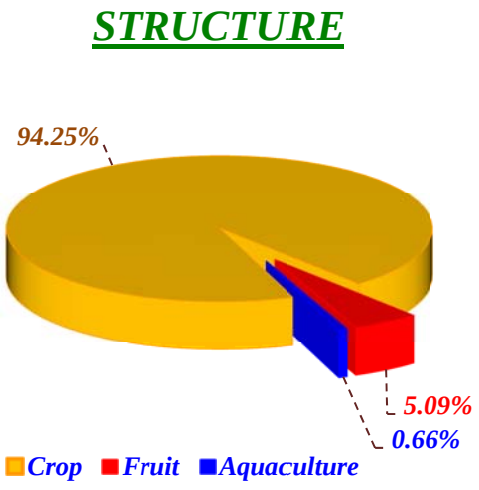
- *Crop Insurance*: 85% (15% in-built deductible)
- *Fruit Insurance*: 70% (30% in-built deductible)

BUSINESS DEVELOPMENT

❖ PREMIUM INCOME

Premium income per year is indicated as following chart in Korean Won (KPW).





❖ AGRICULTURE REINSURANCE

From 2017 Polestar Insurance Company has been arranging Crop Stop Loss Treaty (Rice only) and Crop Quota Share Treaty (Potato only), the structures of which are as follows.

- *Crop Stop Loss Treaty (Rice only)*

  1st layer: 100% xs 100%

  2nd Layer: 100% xs 200%

- *Crop Quota Share Treaty (Potato only)*

  Treaty limit: KPW 50,000,000
  (CHF 384,615.38)

In 2019 the company plans to arrange agriculture quota share treaty covering aquaculture and fruit insurance with treaty limit of KPW 100,000,000 (CHF 769,230.77).

DISCLAIMER NOTE

THIS IS NOT FOR ANY BUSINESS OFFER BUT SERVES AS INFORMATION ONLY.

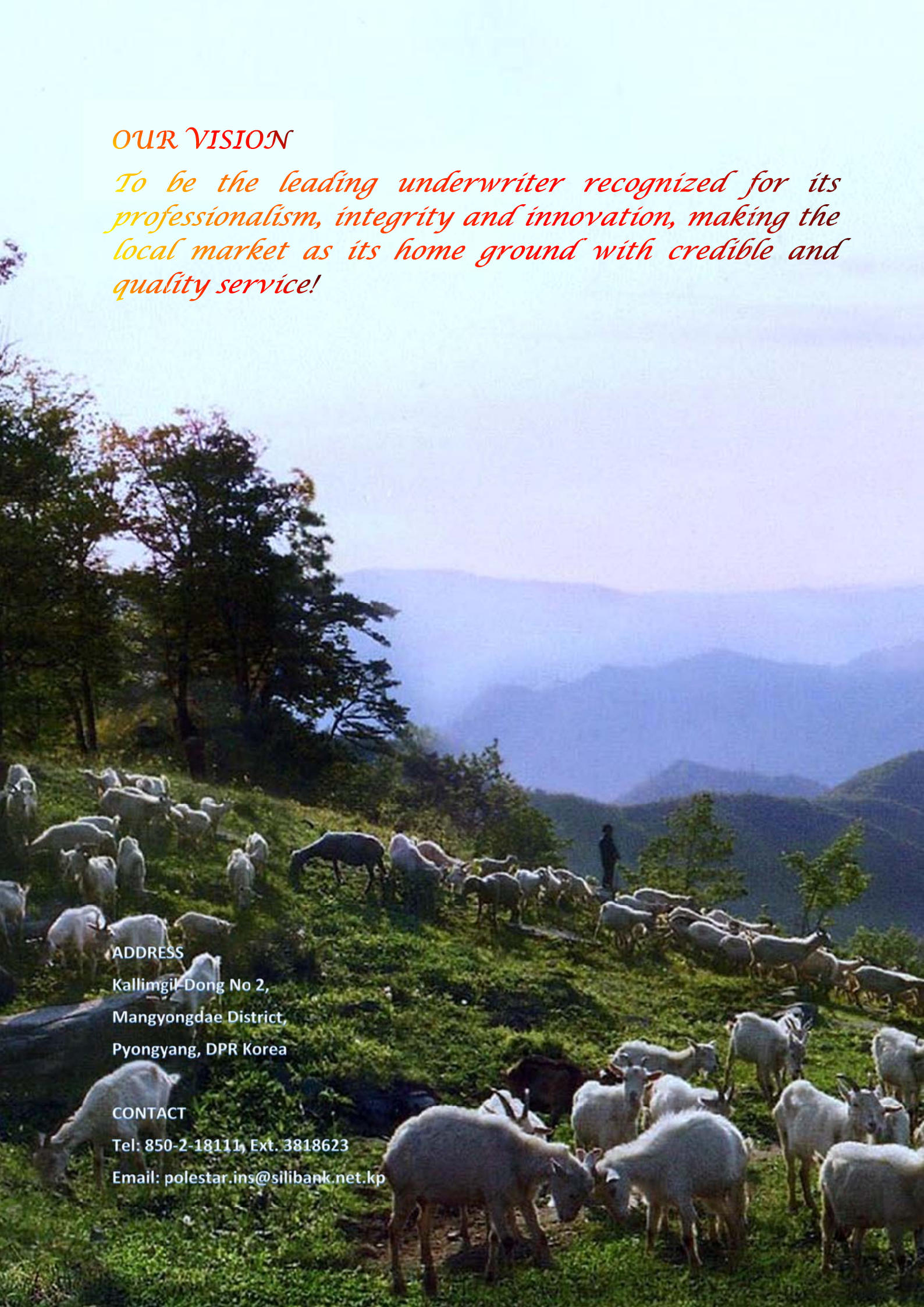
---

[1] ***INFORMATION***

- ***DPR Korea---------- Democratic People's Republic of Korea***
- ***PIC---------- Polestar Insurance Company***
- ***CARA---------- Central Agricultural Risks Association***
- ***KPW (Korean Won) --- Currency of DPR Korea (ROE - KPW 130 = CHF 1)***
- ***Jongbo---------- local measurement unit of acreage,***
  1 jongbo = 9,917.40 m²≈1 ha (hectare)

OUR VISION

To be the leading underwriter recognized for its professionalism, integrity and innovation, making the local market as its home ground with credible and quality service!



ADDRESS

Kallimgil-Dong No 2,

Mangyongdae District,

Pyongyang, DPR Korea

CONTACT

Tel: 850-2-18111, Ext. 3818623

Email: polestar.ins@silibank.net.kp